

MAJOR CLASSIFICATION INDEX OF ARTICLES

AGRICULTURAL GEOCHEMISTRY

Natural isotope tracers in the vine ecosystem 1-11

ANALYSIS

CO₂ absorption method for ¹⁴C dating 625-633

ARCHAEOLOGICAL GEOCHEMISTRY

Albumin preservation, Taima-taima mastadon skeleton 255-259
Amino acid racemization in bone: the boiling of Lothar I 325-327
Collagen molecular preservation in 11,000 a-old Megaceros antler 301-302
Detection of bone preservation 281-292
Editorial comments on First First International Workshop on Fossil Bone 211-213
ESR dating of tooth enamel 329-330
Examples of chemical changes during fossilization 273-280
Fossil bone apatite 233-245
Further studies of U-series dating of fossil bone 331-337
Impact of microbial activity on trace element concentrations in excavated bones 293-298
Ionic exchange between soil solution and bone 303-316
Microscopical analysis of fossil bone 215-229
Molecular structure of bone and its relation to diagenesis 231-232
Note on microbial influence on C and N isotopes in bone 299
Note on the isolation of single amino acids from fossil bone 271
O isotope variation in bone phosphate 317-323
Radiocarbon dating of bone 249-253
Trace elements in fossil bone 247-248
U and Th in fossil bones: activity ratios and dating 339-342
Weathering sequence of wildebeest bones 261-270

ENVIRONMENTAL GEOCHEMISTRY

Aqueous geochemistry of Berkeley Pit, Butte, Montana, USA 23-36
Contamination in a desert stream, Arizona, USA 445-454
I dispersion in a peat bog, Manitoba, Canada 423-432
Salt sources, Yilgarn Block, Australia 79-92
Se in groundwater after mining, Wyoming, USA 565-575
Selenium, Kesterson Reservoir, California, USA 543-563
Sulfur in waters from Nova Scotia basins, Canada 93-98
Trace elements at river-sea interface, Adige River, Adriatic Sea 409-421
Transit of SO₄ in a Canadian Shield lake watershed 195-201

Radioactive Waste Disposal

Fission product retention, Oklo 49-62
Leaching of natural and nuclear waste glasses in sea water 593-604
Radionuclide sorption characterization studies, Hanford, WA, USA 63-77
Radionuclide sorption on minerals, East Bull Lake pluton, Ontario, Canada 163-176
Review of modelling of radionuclide transport 527-537
U and Ra in groundwater, Manitoba, Canada 577-592
U-series nuclides, Golden Fault, Colorado: dating fault displacement 177-182

EXPLORATION: ENERGY RESOURCES

Petroleum and Natural Gas

Biological markers from terrestrial source rocks and crude oils, PRC 13-22
Fixed-ammonium in clays associated with crude oils 605-616
Stable isotopes, New Zealand crude oils: 1. Carbon 109-120
Stable isotopes, New Zealand crude oils: 2. Sulfur 121-130

Uranium

U anomaly evaluation in groundwater, Nisa, Portugal 375-394

Geothermal Resources

Application of gas geobarometry, Italian geothermal areas 465-472

EXPLORATION: MINERAL RESOURCES

Fluid inclusion composition, Baltic Sea quartz 473-481
Organic material and Kupferschiefer mineralization, Poland 151-161

Gold

Biogeochemical haloes of Au in various species and parts of plants 369-374
Organic matter and Au-ore association, France 143-149
Reduced S in fluid inclusions - Au deposits 483-491

Non-metallic

Geochemistry and genesis of Austrian talc deposits 511-525
Smectite and clinoptilolite, Turkey 635-644

Other Metallic Deposits

Current karst bauxite formation, Haiti 37-47
Review of origins of metal rich Pennsylvanian black shales 347-367

FORMATION WATERS

Origin and evolution of formation waters, Norwegian shelf 131-142
Pore fluid generation, L. Permian, Palo Duro Basin, Texas 455-464

HYDROGEOLOGY

Application of dialysis to trace elements in groundwater 617-624
Geochemical evolution of groundwater in a closed basin, Nevada 493-510

MEDICAL GEOCHEMISTRY

Human impact on N geochemistry, Byelorussia, USSR 437-444
Iodine in waters: possible links with endemic goitre 203-208

OTHER TOPICS

REE in Mn-micronodules and sediments, Pacific 183-193
S and Sr isotopes, L. Permian anhydrite, Texas 395-407
Sterilization of sediments by ionizing radiation 99-103

SUBJECT INDEX

actinides

²⁴¹Am 163
 Adige River mouth, Italy 409
 Adriatic Sea (northern), Italy 409
 adsorption 63
 Aeolian Islands, Italy 465
 aerosols, marine
 source of salts in brines 79
 source of sulfate 93
 Africa
 North 203
 Oklo, Gabon 49
 Ag,
 in natural fission reactor 49
 agriculture 437
 vine 1
 Al
 in bauxite 37
 in fossil bone 303
 in groundwater 375
 in pit water 23
 in tailings seep 445
 albumin, in fossil bone 255
 alkali elements, ¹³⁷Cs 163
 alkaline earth elements, ⁹⁰Sr 163
 alkylthiolane 13
 alkylthiophene 13
 alteration
 chemical properties 99
 replacement of pyroxenes 163
 alunite, control of brine composition 79
²⁴¹Am, sorptive capacity 163
 amino acid racemization, in bone 325
 amino acids
 in fossil bone 271, 281
 ammonium
 in clay minerals 605
 N 437
 amorphous ferric hydroxide 23
 analysis, ¹⁴C dating 625
 Analytical Methods
 ESR dating 329
 histology 215
 neutron activation analysis 347
 NMR 1
 anhydrite, S and Sr isotopes 395
 anionic-forming fission products
 ⁷⁵Se 163
 ^{95m}Tc 163
 anomaly, U deposits 375
 anoxic, methodology 63
 apatite
 in bone 329
 in fossil bone 233, 281
 aqueous geochemistry 23
 aquifers, shale 347
 Ar, in clinoptilolite 635
 archaeology 339
 archaeological sites 329
 bone preservation 281
 fossil bone 233
 human bone 215, 249
 Arizona, USA, Eureka Mining District 445
 aromatic hydrocarbons, in Kupferschiefer 151
 arsenopyrite, Au content 143

As

in pit water 23
 in tailings seep 445
 aspartic acid, in bone 325
 atmosphere
 bone weathering 233
 Au
 in black shales 483
 exploration, in black shales 483
 ore genesis 143
 in plants 369
 Australia
 South Australia 303
 Western Australia 79
 Austria
 Lassing 511
 Rabenwald 511

Ba

in bone decay 293
 in fossil bone 303
 in groundwater 375
 Baltic Sea 99
 Baltic Shield, Sweden 473
 basalt
 flow top cores 63
 radwaste disposal 63
 base metals 473
 bauxite, formation 37
 Berezinian Biosphere Reserve 437
 Berkeley Pit, Montana, USA 23
 Bigadic, western Turkey 635
 biogeochemical exploration
 Au deposits 369
 biogeochemistry, bone 233
 biological markers 13
 biphenyl, in Kupferschiefer 151
 bitumen, S isotopes 121
 Black Hills, USA 347
 black shale 483
 Blanchetown, South Australia 303
 bog, I dispersion test 423
 bone
 archaeological 303
 -- see fossil bone
 mineral 293
 preservation 281
 BOOK REVIEWS
 Biogeochemical exploration
 for mineral deposits 433
 Geochemistry and Mineral Formation in
 the Earth Surface 539
 Great Glen, Regional Geochemical
 Atlas 105
 bottom sediments 409
 Br, in formation water 131
 brine 131
 basinal 347
 internal drainage basin 79
 brushite, in fossil bone 233, 273
 Byelorussia, USSR 437

C 281

in Au ore 143
 in black shales 347
 in bone 325

- C
 - in fossil bone 233, 249
 - in Kupferschiefer 151
 - isotopes in bone 299
 - isotopes in carbonates 455
 - isotopes in crude oil 109
 - organic 565
- ¹⁴C
 - in fossil bone 271
 - dating of groundwater 625
- Ca
 - in bauxite 37
 - in bone decay 293
 - in fluid inclusions 473
 - in fossil bone 233, 303
 - in groundwater 375, 493
 - in pit water 23
 - in talc deposits 511
- calcic amphiboles 163
- calcination, for Au ore 143
- calcite 493
 - in fossil bone 273
- calcrete, control of brine composition 79
- California, USA, Kesterson Reservoir 543
- Canada
 - Lac du Bonnet, Manitoba 423
 - Manitoba (eastern) 423
 - Manitoba 577
 - Nova Scotia 93
 - Ontario, East Bull Lake, Massey 163
 - Quebec 195
- Canadian Shield 577
- carbonate 109
- carbonate reservoir rocks 131
- carbonate-evaporite rocks 465
- carcinogenic diseases 437
- carotane 13
- Cd
 - anthropogenic influence 409
 - in black shales 347
 - in natural fission reactor 49
 - in pit water 23
- Ce
 - in marine sediments 183
 - in Mn micronodules 183
- ¹⁴⁴Ce
 - sorptive capacity 163
- Ce/La ratio
 - in marine sediments 183
 - in Mn micronodules 183
- Central USA 347
- CH₄
 - in geothermal gases 465
- chemical evolution, of groundwater 493
- chemical weathering 79
 - of microtektites 593
- chlorite, in talc deposits 511
- Cl
 - in groundwater 79, 375, 493
- clastic reservoir rocks 131
- clay minerals 493
 - fixed ammonium 605
- clayey carbonate 177
- claystone 177
- clinoptilolite
 - in lacustrine sediments 635
- CO
 - in geothermal gases 465
- CO₂
 - in geothermal gases 465
- Co
 - in talc deposits 511
- CO₂/CH₄ ratio
 - in Au deposits 483
- coal 565
 - in Au deposit 143
 - S isotopes 121
- Coastal Plain aquifer, Israel 617
- collagen
 - in bone 299
 - in fossil bone 215, 249, 281, 301
 - in weathered bone 261
- Colorado, USA, Golden 177
- computer program
 - MINTEQ 23
 - PHREEQE 23
- contaminant migration 423
- contamination
 - biological 215
 - by tailings seep 445
 - estuarine environment 409
 - l sources 203
 - mineral 215
 - soil fungi 299
- Cr
 - anthropogenic influence 409
 - in talc deposits 511
- ¹³⁷Cs, sorptive capacity 163
- Cu
 - anthropogenic influence 409
 - in groundwater 617
 - in Kupferschiefer 151
 - in pit water 23
 - in tailings seep 445
- dahlite 233
- dating fault displacement 177
- dating, fossil bone 249
- degradation, of fossil bone 215
- dehydroxytocopherols 13
- denitrification, biosphere 437
- diagenesis
 - bone 231, 303
 - fossil bone 233, 249, 273
 - zeolites 635
- dialysis cell 617
- dibenzofuran, in Kupferschiefer 151
- dibenzothiophene, in Kupferschiefer 151
- diffusion 617
- dissolution 593
 - pyrite 93
- Dolgell, Gwynedd, United Kingdom 483
- dolomite, in talc deposits 511
- East Bull Lake, Massey, Ontario, Canada 163
- Eh measurements, pit water 23
- element retention 49
- endemic goitre 203
- environmental geochemistry 565
- Erratum 645
- ESR, electron spin resonance 329
- estuarine
 - environment
 - anthropogenic contamination 409
 - processes 409
- ethanol 1
- Eu
 - in clinoptilolite 635
 - in smectite 635
- Eureka Mining District, Arizona, USA 445
- evaporites
 - source of brines 131
 - source of sulfate 93

evapotranspiration
 in groundwater origin 493
exploration 473
extraction of Au 143

F, in groundwater 375
fault gouge 177
faults

 dating with U-isotopes 177

Fe
 in fossil bone 303
 in groundwater 375
 in pit water 23
 in pore water 99
 in removal of Sr 163
 in tailings seep 445

Federal Republic of Germany, Kunigsutter 325

First International Workshop
 on Fossil Bone 211

fission products 49

fluid inclusions 347
 composition 473
 decrepitation 473
 in quartz 473
 in sphalerite 455
 in vein quartz 483

formation water 347
 Palo Duro Basin 455

FOSSIL BONE

 amino acids 271, 281, 325

 albumin 255

 apatite 233, 329

 brushite 273

 collagen 301

 crystallographic alteration 261

 diagenesis 231, 233, 249

 ESR dating 329

 First International Conference 211, 343

 fossilisation 273

 Geochronology

¹⁴C 249, 271

 ESR 329

 U-series 331, 339

 ion exchange 303

 Isotopes

 C 299

 N 299

 O 317

 microbial activity 293, 299

 microscopical analysis 215

 model, bone fossilisation 303

 molecular structure 231

 molecular preservation 261, 301

 phosphate 317

 post-mortem histology 215

 preservation 215, 281

 radiocarbon dating 249, 271

 tooth enamel 329

 trace elements 247, 293, 303

 U-series dating 331, 339

 vivianite 273

 weathering 261

fossilisation of bone 273, 303

francolite 233

fracture-filling minerals

 role in radwaste disposal 163

France

 Saumur-Champigny 1

 West Vigés Prospect, Creuse 143

fumaroles

 H₂/CO ratio 465

Gabon, Africa 49

gabbroic pluton 163

gammacerane 13

gases

 CH₄ 465

 CO 465

 CO₂ 465

 H₂ 465

'gelatin', in fossil bone 281

geobarometry, geothermal systems 465

GEOCHEMICAL EXPLORATION

 Au deposits 369

 for Au 143

 geothermal areas 465

 for petroleum 605

 U deposits 375

 geochemical modelling

 of groundwater 493

 geochemical trap 151

GEOCHRONOLOGY

¹⁴C dating 625

 ESR dating of tooth enamel 329

 radiocarbon 249

 fossil bone 271

 U-dating 177

 U-series dating, fossil bone 331, 339

 geothermal gases 465

 geothermal gradients 465

 gibbsite

 in karst 37

 glass, natural 593

 glucose 1

 Gold Ox Hill, People's Republic of China 339

 gold-ore 143

 Golden, Colorado, USA 177

 granite 79, 527, 577

 groundwater 577

 in closed basin 493

¹⁴C dating 625

 I dispersion 423

 N 437

 trace metals 617

 in U exploration 375

 Gulf Coast Basin, USA 605

 gypsum 23, 493

 control of brine composition 79

 S isotopes 79

H, isotopes in vine ecosystem 1

H₂, in geothermal gases 465

Haiti, Jacmel, southern peninsula 37

halite, control of brine composition 79

halos

 Au deposits 369

 Br in formation water 131

 Cl in formation water 131

 Hanford, Washington, USA 63

 heavy metals, anthropogenic contamination 409

hopanes, in Kupferschiefer 151
 hopanoids 13
 Hoxne, United Kingdom 331
 hydrocarbon 13, 605
 hydrochemistry 617
 hydrogeochemistry 79
 in U exploration 375
 hydrogeology
 ¹⁴C dating 625
 hydrophilic acid 565
 hydrophobic acid 565
 hydrothermal
 alteration, of carbonates to talc 511
 Au deposit 143
 reaction 511
 system 465
 hydroxyapatite
 ESR dating 329
 in fossil bone 215
 in weathered bone 261

I
 dispersion in bog 423
 in groundwater 203
 in soil 203
 in surface water 203
 I⁻, in I dispersion test 423
 I₂, in I dispersion test 423

ICP, inductively coupled plasma 473
 illite, fixed ammonium 605
 Indonesia
 Ngandong 339
 Sonde 339
 iodide, dispersion 423
 ion exchange 493
 in fossil bone 233
 ion substitution, in clay minerals 605
 ionic exchange
 in bone diagenesis 303
 ionic substitution, in bone diagenesis 303
 ionizing radiation 99
 isoprenoid alkane 13

ISOTOPES

age curves 455

C 511

in bitumen 109
 in bone 299
 in carbonate rocks 455
 in coal 109
 in crude oil 109
 in kerogen 109

¹⁴C in bone amino acids 271

H in formation water 131

N in bone 299

O 511

in bone phosphate 317
 in Canadian Shield lakes 195
 in carbonate rocks 455
 in formation water 131
 in sulfate 93

Ra, in groundwater 577

²²⁶Ra in fault-zone material 177

S

in anhydrite 395
 in bitumen 121

ISOTOPES

S

in brine 79
 in coal 121
 in crude oil 121
 in kerogen 121
 in pyrite 121
 in sulfate 93, 121

Sr

in anhydrite 395
 in brine 79
 in carbonate rocks 455
 in formation water 131

stable 493

Th in fossil bone 339

²³⁰Th in fault-zone material 177

²³²Th in fault-zone material 177

U

in fossil bone 339

in groundwater 577

²³⁴U in fault-zone material 177

²³⁸U in fault-zone material 177

isotopic composition

O in bone phosphate 317

isotopic dating

of clinoptilolite 635

of smectite 635

isotopic tracing 635

isotopic variation

deuterium 1

mobility 177

in natural fission reactor 49

Israel, Coastal Plain aquifer 617

Italy

Adige River mouth 409

Aeolian Islands 465

Latium 465

northern Adriatic Sea 409

Phlegraean Fields 465

Tuscany 465

Jacmel, southern peninsula, Haiti 37

jarosite 23

jurbanite 23

K

in clinoptilolite 635

in fluid inclusions 473

in fossil bone 303

in groundwater 375

in I dispersion test 423

in pit water 23

" increase in Cs sorption 163

Konigsutter, Federal Republic of Germany 325

kaolinite 79

in bauxite 37

karst, bauxite formation 37

kerogen 109

S isotopes 121

Kesterson Reservoir, California, USA 543

KI, contaminant test 423

kinetics, leaching

of microtektites 593

Ksar Akil, Lebanon 339

Kupferschiefer, hydrocarbons 151

Lac du Bonnet, Manitoba, Canada 423, 577

lacustrine

environment 635

sediments 13

source rocks 13

landscape geochemistry 437

Lassing, Austria 511

Latium, Italy 465

Lebanon, Ksar Akil 339

leucophyllite 511

Li, in groundwater 375

limestone, association with I 203

magnesite, in talc deposits 511

Manitoba, Canada 577

(eastern) 423

Lac du Bonnet 423, 577

marine-type organic matter 347

Marsworth, United Kingdom 331

mastadon, albumin preservation 255

MEDICAL GEOCHEMISTRY 437

metal-particle interactions 409

metals, in tailings seep 445

4-methyl sterane 13

methylphenanthrenes, in Kupferschiefer 151

Mg

in bone decay 293

in fossil bone 303

in groundwater 375, 493

in microtektite glass 593

in pit water 23

in removal of Sr 163

in talc deposits 511

Mg-transport 511

microbial activity, effect on bone 299

microbiology, Se cycling 543

microorganisms, in bone diagenesis 273

microradiography, of fossil bone 215

microtektites 593

Midwest USA 347

mineral dissolution 493

mineral precipitation 493

mineralization

base metals 473

disseminated 375

vein-type 375

mining, surface coal 565

Missouri, USA 203

Mn

in fossil bone 303

in groundwater 375, 617

in pit water 23

in tailings seep 445

Mo

in black shales 347

in natural fission reactor 49

modelling 527

aqueous geochemistry 23

diagenesis 293, 299

molecular preservation

of bone 261

in fossil bone 301

molecular structure, of bone 231

Montana, USA, Berkeley Pit 23

mudstone, fixed ammonium 605

Murray River, South Australia 303

N 281

ammonium 437

in bone 325

isotopes in bone 299

organic 437

in plants 437

in soils 437

in waters 437

Na

in fluid inclusions 473

in groundwater 79, 375, 493

in pit water 23

natural fission reactors 49

Nd, in natural fission reactor 49

Nevada, USA, Smith Creek Valley 493

New Zealand 109, 121

Ngandong, Indonesia 339

NH₄, in clays 605

Ni, in talc deposits 511

Nisa, Portugal 375

nitrate 437

nitrite 437

NO₃, in groundwater 375

North Africa 203

Northern England, United Kingdom 203

Norway, Norwegian Shelf 131

Norwegian Shelf, Norway 131

Nova Scotia, Canada 93

O

in bone 325

isotopes in bone phosphate 317

isotopes in carbonates 455

isotopes in groundwater 195

isotopes in lake water 195

isotopes in SO₄ 93, 195

Oklo, Gabon, Africa 49

Ontario, Canada, East Bull Lake, Massey 163

ore, U 49

ore deposits, Au 369

ore formation 473

organic geochemistry 13

of Kupferschiefer 151

organic matter

in Au ore genesis 143

in black shales 347

in Kupferschiefer 151

marine-type 347

terrestrial-type 347

orthophosphate 99

oxidation

secondary 151

potential

in control of U contents 577

P

in bone decay 293

in fossil bone 233, 303

Pacific Ocean 183

paleoclimate 317

paleodiets 281, 299

- Palo Duro Basin, Texas, USA 395, 455
 particulate matter properties 409
 pathfinder elements 369
 Pb
 anthropogenic influence 409
 in Kupferschiefer 151
 Pd
 in natural fission reactor 49
 peat bog, I dispersion test 423
 People's Republic of China 13
 Gold Ox Hill 339
 Pestera, Romania 339
 petroleum
 C isotopes 109
 exploration 605
 low-S, New Zealand 121
 S isotopes 121
 terrestrial 13
 phenanthrene, in Kupferschiefer 151
 Phlegraean Fields, Italy 465
 phosphate
 in fossil bone 233
 in groundwater 375
 O isotopes, bone 317
 photosynthesis, environmental effects 1
 phytane 13
 Pinhole Cave, Creswell Crags,
 United Kingdom 331
 plagioclase, weathering 493
 Poland, southwest 151
 polar compounds, in Kupferschiefer 151
 pollution 437
 by Se 543
 by tailings seep 445
 Portugal, Nisa 375
 Powder River Basin, Wyoming, USA 565
 precipitation
 acid 93
 O isotopes 195
 pyrite
 dissolution 93
 S isotopes 121
 pyroxenes 163
- quartz
 fluid inclusions 473, 483
 Quebec, Canada 195
- Ra
 in basalt flow top 63
 in fault-zone material 177
 mobility 527
- ²²⁶Ra, in groundwater 577
 Rabenwald, Austria 511
 racemization, amino acid 325
 radiation 99
 radioactive waste analogs 177
 radioactivity, water 577
 radiolysis 99
 radionuclide
 sorption 163
 transport 527
 radwaste disposal 527
- rare earth elements
 ¹⁴⁴Ce 163
 in marine sediments 183
 in Mn micronodules 183
 Rb, in smectite 635
 reaction rates
 microtektite leaching 593
 redox reactions 151
 reduced sulfur
 in vein quartz 483
 REE, in smectite 635
 remediation, pit water 23
 river/sea interface 409
 Romania, Pestera 339
 Ru, in natural fission reactor 49
- S 121
 in fluid inclusions 483
 in fossil bone 303
 isotope
 chronostratigraphy 395
 in gypsum 79
 in sulfate 93
 salinity 79, 493
 salt 79
 sandstone 177
 Saumur-Champigny, France 1
 Se
 in basalt flow top 63
 in black shales 347
 contamination 543
 in groundwater 565
 in organic detritus 543
 in soil 543
 in surface water 543
- ⁷⁵Se, sorptive capacity 163
 seawater, leaching of microtektites 593
 sedimentary rocks
 anhydrite 455
 S and Sr isotopes 395
 black shale 347
 dolomite 455
 limestone 455
 sediments 13
 effect of radiolysis 99
 lacustrine 13
 Pacific Ocean 183
 sterilization method 99
 selenite 79
 shales, black, metal-rich 347
 Si
 in bauxite 37
 in fossil bone 303
 in groundwater 375
 in microtektite glass 593
 smectite
 fixed ammonium 605
 in lacustrine sediments 635
 Smith Creek Valley, Nevada, USA 493
 Sn
 in natural fission reactor 49
- SO₄
 in groundwater 493
 in pit water 23
 in tailings seep 445

- soil
 - in bone diagenesis 273
 - composition 1
 - distribution coefficient
 - Kd 423
 - I content 203
 - O isotopes 195
 - solution
 - in bone diagenesis 303
 - thermal, burnt bones 233
 - Soldiers' Hole, Cheddar Gorge, United Kingdom 331
 - solution aqueous 617
 - solutions, ascending 151
 - Sonde, Indonesia 339
 - sorption
 - of I in bog 423
 - radionuclides 63
 - sorptive capacity, radionuclides 163
 - source rock 109, 121
 - South Australia, Australia 303
 - Blanchetown 303
 - Murray River 303
 - spectrometry, α 339
 - spent fuel 49
 - sphalerite
 - in black shales 347
 - fluid inclusions 455
 - Sr 281
 - in basalt flow top 63
 - in bone decay 293
 - in fossil bone 233, 303
 - in groundwater 375
 - isotope chronostratigraphy 395
 - isotopes
 - in brine 79
 - in carbonates 455, 635
 - in smectite 635
 - in talc deposits 511
 - ⁹⁰Sr, sorptive capacity 163
 - stable isotopes, in bone 299
 - statistics
 - discriminant function analysis 375
 - factor analysis 375, 565
 - gap test 375
 - Q-mode cluster analysis 375
 - sterilization, of sediments 99
 - steroids 13
 - stream, pollution 445
 - sulfate
 - isotopes of S and O 93
 - in pore water 99
 - S isotopes 121
 - surface, leached
 - of microtektites 593
 - suspended matter 409
 - Sweden, Baltic Shield 473
- tailings, seep pollution 445
- talc deposits, genesis 511
- ^{95m}Tc, sorptive capacity 163
- Te, in natural fission reactor 49
- tektites 593
- terrestrial-type organic matter 347
- Texas
 - Palo Duro Basin, USA 395
 - Panhandle, USA 395, 455
- Th
 - in fault-zone material 177
 - in fossil bone 331, 339
- thermal history of bone 325
- thermodynamic data, As 23
- thermodynamics, WATEQ 375
- thiols, in Se solubility 543
- Ti, in fossil bone 303
- tooth enamel, ESR dating 329
- trace elements 565
 - behaviour 409
 - in fossil bone 233, 247, 281, 293
 - in talc deposits 511
- trace metals, in groundwater 617
- transport, radionuclides 63
- travertine 465
- triterpanes 13
- Turkey, Bigadic 635
- Tuscany, Italy 465
- U 565
 - in basalt flow top 63
 - in black shales 347
 - in bone 329
 - deposits
 - disequilibrium 527
 - in fault-zone material 177
 - in fossil bone 331, 339
 - in groundwater 375, 577
 - mobility 527
 - in natural fission reactor 49
- U-series dating 331
- U-series disequilibrium 527, 577
- ultramafic rocks 511
- United Kingdom 203
 - Dolgellau, Gwynedd 483
 - Hoxne 331
 - Marsworth 331
 - Northern England 203
 - Pinhole Cave, Creswell Crags 331
 - Soldiers' Hole, Cheddar Gorge 331
- uraninite 49
- USA
 - Arizona, Eureka Mining District 445
 - Black Hills 347
 - California, Kesterson Reservoir 543
 - Central 347
 - Colorado, Golden 177
 - Gulf Coast Basin 605
 - Hanford, Washington 63
 - Midwest 347
 - Missouri 203
 - Montana, Berkeley Pit 23
 - Nevada, Smith Creek Valley 493
 - Palo Duro Basin, Texas 395
 - Texas Panhandle 395, 455
 - Wyoming, Powder River Basin 565
- USSR, Byelorussia 437
- V, in black shales 347
- vapor phase 465
- Venezuela 255
- vine, water cycle 1
- vivianite, in fossil bone 273
- volcanic tuffs 493
- volcanic-sedimentary rocks 635
- volcano-sedimentary tuffs 143
- wallrock alteration, of talc deposits 511
- Washington, USA, Hanford 63

waste management
 nuclear fuel 163
 radioactive 63, 593
 tailings pollution 445
water
 drinking 203
 formation 131
 ground 37, 79
 ground
 in faults 177
 karst 37
 marine 347
 pollution 23, 565, 617
 pore 99
 salts 79
 subsurface 203
 surface 203
 tailings seep 445
water-rock interaction 79
weathering 79
 bone 261
West Viges Prospect, Creuse, France 143
Western Australia, Australia 79
whitlockite 233
wine, H isotopes 1
Wyoming, USA, Powder River Basin 565

zeolites 493

Zn

 in black shales 347
 in bone decay 293
 in Kupferschiefer 151
 in pit water 23
 in tailings seep 445

AUTHOR INDEX
(Book Review - BR)

- | | | |
|-----------------------|------------------------------|---------------------------------|
| Aagard P. 131 | Grun R. 329 | Puttmann W. 151 |
| Adel-Hadadi M.A. 593 | Grupe G. 293, 299 | Qureshi R.M. 625 |
| Adiga R. 593 | Gundogdu M.N. 635 | Rabitti S. 409 |
| Alterescu S. 593 | Guoying S. 13 | Rae A. 331 |
| Ames L.L. 63 | Gwozdz R. 183 | Rampazzo G. 409 |
| Amiel A.J. 617 | Hallstadius L. 99 | Rampe J.J. 445 |
| Aravena R. 625 | Hare P.E. 261 | Rankin A.H. 473 |
| Ashenberg D. 23 | Hedges R.E.M. 211, 249, 331 | Renner R.M. 183 |
| Asselin C. 1 | Herrmann B. 325 | Rice J.A. 565 |
| Bada J.L. 325 | Hirner A.V. 109, 121 | Robichet J. 1 |
| Barkatt A. 593 | Hitchon B. 539 (BR) | Robinson B.W. 121 |
| Barkatt Al. 593 | Hutton J.T. 303 | Ronen D. 617 |
| Bartstra G.J. 339 | Ivanovich M. 211, 331 | Rosholt J.N. 177 |
| Behrensmeyer A.K. 261 | Jaouni A.-R. 543 | Rosman K. 49 |
| Benedetti M. 37 | Joep E.M. 301 | Runnells D.D. 445 |
| Benjamin T. 49 | Joep M. 301 | Saad E.E. 593 |
| Bildgen P. 37 | Juracic M. 409 | Sassen R. 605 |
| Boldrin A. 409 | Kaminen D.M. 163 | Schoeninger M.J. 281, 299 |
| Bonnot-Courois C. 635 | Kingston J.D. 281 | Schwarcz H.P. 93, 211, 329, 527 |
| Bottrell S.H. 483 | Kolodny Y. 317 | Sheppard M.I. 423 |
| Boulegue J. 37 | Kovalevskaya O.M. 369 | Smith P.A. 423 |
| Brand N.W. 483 | Kovalevskii A.L. 369 | Sousanpour W. 593 |
| Carignan R. 195 | Kramer J.R. 93 | Speczik S. 151 |
| Carman R. 99 | Kunzendorf H. 183 | Stoffers P. 183 |
| Chiodini G. 465 | Kyle J.R. 455 | Szabo B.J. 177 |
| Chinn E.W. 605 | Latham A.G. 527 | Tessier A. 195 |
| Cioni R. 465 | Law I.A. 249 | Thibault D.H. 423 |
| Clair T.A. 93 | Levinson A.A. (BR) 105 | Thirlwall M.F. 79 |
| Clauer N. 635 | Lindblom S. 473 | Thomas J.M. 493 |
| Coveney, Jr. R.M. 347 | Loss R. 49 | Thompson M. 473 |
| Curtis D. 49 | Lukashev K.I. 437 | Ticknor K.V. 163 |
| Davis A. 23 | Luz B. 317 | Traub W. 231 |
| Dekkers M.J. 375 | Lyon G.L. 109 | Tsao L. 543 |
| DeLaeter J. 49 | Lyons W.B. 79 | Turner J. 79 |
| Delmore J.E. 49 | Maeck W.J. 49 | Tuross N. 255, 261 |
| DeNiro M.J. 231 | Magaritz M. 617 | Vandergraaf T.T. 163 |
| Disnar J.-R. 143 | Man E.H. 325 | van der Pliet J. 339 |
| Drimmie R. 625 | Martin G.J. 1 | van der Weijden C.H. 375 |
| Dunn C.E. (BR) 433 | McArthur J.M. 79 | van der Wijk A. 339 |
| Eanes E.D. 261 | McGarrah J.E. 63 | van Gaans P.F.M. 375 |
| Edvardsson U.G. 99 | Menegazzo Vitturi L. 409 | van Klinken G.J. 271 |
| Egeberg P.K. 131 | Merz C. 151 | Vriend S.P. 375 |
| Elster H. 231 | Miller M.F. 483 | Weiner S. 231 |
| Ferrell Jr. R.E. 605 | Moore K.M. 281 | Welch A.H. 493 |
| Fisher L.W. 261 | Morlat R. 1 | Wells M. 617 |
| Fisher R.S. 395, 455 | Murray M.L. 281 | Weres O. 543 |
| Fritz P. 625 | Naftz D.L. 565 | Williams C.T. 247 |
| Fu Jiamo 13 | Naulet N. 1 | Williams L.B. 605 |
| Fuge R. 203 | Newesely H. 233 | |
| Gancarz A. 49 | Norrish K. 303 | |
| Garland A.N. 215 | Odiot D. 1 | |
| Gascoyne M. 577 | O'Keefe J.A. 593 | |
| Gatellier J.-P. 143 | Onoshko M.P. 437 | |
| Gelineau M. 195 | Ostlund P. 99 | |
| Glasby G.P. 183 | Pate E.D. 303 | |
| Glascock M.D. 347 | Payan I.L. 325 | |
| Godineau V. 1 | Piepenbrink H. 273, 293, 299 | |
| | Posey H.H. 395, 455 | |
| | Preissler A.M. 493 | |
| | Prochaska W. 511 | |
| | Puls R.W. 63 | |

